

From: [Shawn Ghose](#)
To: jean.mescher@mckesson.com
Subject: Clean Up values for Dioxin
Date: 04/11/2011 10:53 AM
Attachments: [Excavation map rogers road p14.pdf](#)
[how cleanup in 1995 met 78 ppt cleanup value.doc](#)

Jean: The attached report from Rogers Road shows how real clean up was in ppt even though clean up numbers were 10 ppb for Dioxin at Rogers Road



Excavation map rogers road p14.pdf how cleanup in 1995 met 78 ppt cleanup value.doc

Clean out values for Dioxin in response to QB on toxicity characteristics change after correction by Don and Site Attorney

Arkwood

System Operations and Maintenance (O & M): Groundwater treatment system operations are conducted by an environmental contractor, James E. Fler, Principal Engineer, Oxford Environmental and Safety, Inc..

The contractor is responsible for maintaining the groundwater treatment system in good operating condition and collecting monthly operational samples, as well as, inspecting the Site fencing, vegetative cover, storm water drainage system and buildings.

Early Indicators of Potential Remedy Failure: There is no indication of remedy failure. The Site is inspected on a regular basis and operation and maintenance activities of the groundwater treatment system are monitored daily.

Question B: Are the assumptions used at the time of remedy selection still valid?

Changes in Standards To Be Considered: This five-year review did not identify any changes in Federal or State standards that impact the soil or groundwater remedies at the Arkwood, Inc. The Site is in compliance with the State Water Quality Standards for PCP of 9.3 µg/l for a monthly average and 18.7 µg/l for a daily maximum.

Changes in Exposure Pathways: This five-year review did not identify any changes in exposure pathways since the completion of the soil remediation. The filed Deed Restriction, when revised to correct the minor errors in the metes and bounds description and to provide notice that the Site is zoned for only industrial use, will be completely effective in preventing any current or planned changes in land use. Access to the remediated area is restricted because of fencing, signs and locked gates. There is no indication that the treated wastes were not properly characterized, removed and treated during the soil remediation. There is no indication that the groundwater hydrology was not adequately characterized prior to the implementation of the groundwater remedy.

Changes in Toxicity and Contaminant Characteristics: The clean-up levels for PCP, c-PNAs and dioxin have not changed. EPA's dioxin reassessment has been developed and undergone review over many years with the participation of scientific experts in EPA and other federal agencies, as well as scientific experts in the private sector and academia. The Agency followed current cancer guidelines and incorporated the latest data and physiological/biochemical research into the assessment. The results of the assessment have currently not been finalized or adopted into state or federal standards. In addition, EPA/OSWER has proposed to revise the interim preliminary remediation goals (PRGs) for dioxin and dioxin-like compounds, based on technical assessment of scientific and environmental data. However, EPA has not made any final decisions on interim PRGs at this time. Therefore, the dioxin toxicity reassessment for this Site will be updated during the next Five Year Review. As long as the Site cap remains undisturbed, the Site is protective of human health and the environment and the remedy selection is still valid.